

Date: July 30, 2003 Label No. EV306611785US

I hereby certify that, on the date indicated above, I deposited this paper with identified attachments and/or fee with the U.S. Postal Service and that it was addressed for delivery to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 by "Express Mail Post Office to Addressee" service.

Ashley Smith  
Name (Print)

Ashley Smith  
Signature

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Raymond J. WONG )	Docket No.: 3191-003-01
)	
Application No.: Unassigned )	Parent Examiner: Kuhar, Anthony J.
)	
Filed: July 30, 2003 )	Confirmation No.: Unassigned
)	
Parent Group Art Unit: 1754 )	Customer No. 33432
)	

For: SODIUM ZIRCONIUM CARBONATE AND ZIRCONIUM BASIC CARBONATE  
AND METHODS OF MAKING THE SAME

**INFORMATION DISCLOSURE STATEMENT**  
**PURSUANT TO 37 CFR 1.97(b)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

July 30, 2003

Sir:

The attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached Form PTO-1449. These documents are of record in §120 related Application No. 09/723,396, filed November 28, 2000. In accordance with M.P.E.P. § 609, it is not necessary to provide copies of those documents with this filing.

This Information Disclosure Statement is being submitted before expiration of the three-month period following filing of the above-captioned application.

The above information is presented so that the Patent and Trademark Office can, in the first instance, determine any materiality thereof to the claimed invention. See 37 CFR 1.104(a) and 1.106(b) concerning the PTO duty to consider and use any such information. It is respectfully requested that the information be expressly considered during the prosecution of this application,

Information Disclosure Statement  
U.S. Patent Application No. Unsigned

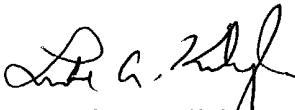
and that the documents cited in the attached Form PTO-1449 be made of record therein and appear on the first page of any patent to issue therefrom.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in this application and applicant determines that the cited documents do not constitute "prior art" under United States law, applicant reserves the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicant further reserves the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

It is believed that no fee is required to make this a complete and timely filing. However, if it is determined that a petition or fee is required, the Commissioner is hereby authorized to charge any fee associated with this statement to our Deposit Account No. 50-0925.

Respectfully submitted,



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Enclosures: PTO-1449

FORM PTO-1449 (REV 7-80)		Atty. Docket No. 3191-003-01		Application No. Unassigned	
INFORMATION DISCLOSURE STATEMENT		APPLICANT: Raymond J. Wong			
		Filing Date: July 30, 2003		Parent Group Art Unit: 1754	

**U.S. PATENT DOCUMENTS**

EXAMINER'S INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE, IF APPROPRIATE
		Des. 282,578	2/11/86	Humphreys et al.	D24	21	
		3,669,878	6/13/72	Marantz et al.	210	22	
		3,669,880	6/13/72	Marantz et al.	210	22	
		3,697,410	10/10/72	Johnson et al.	204	301	
		3,697,418	10/10/72	Johnson	210	22	
		3,703,959	11/28/72	Raymond	210	87	
		3,850,835	11/26/74	Marantz et al.	252	182	
		3,989,622	11/2/76	Marantz et al.	210	22 R	
		3,989,625	11/2/76	Mason	210	94	
		4,025,608	5/24/77	Tawil et al.	423	305	
		4,213,859	7/22/80	Smakman et al.	210	27	
		4,256,718	3/17/81	McArthur et al.	423	419 P	
		4,360,507	11/23/82	McArthur et al.	423	419 P	
		4,460,555	7/17/84	Thompson	423	309	
		4,484,599	11/27/84	Hanover et al.	137	636.1	
		4,495,129	1/22/85	Newberry et al.	264	235	
		4,558,996	12/17/85	Becker	417	374	

**FOREIGN PATENT DOCUMENTS**

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES	NO

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	Raymond J. Wong, "Method of Making Granular Sodium Zirconium Carbonates (SZC) From Zirconium Oxychloride for Dialysis Application and Zirconium Basic Carbonate (ZBC) Manufacture," Southern Ionics Technical Report No. TR-000008, July 25, 2000, pp. 1-10.
	Southern Ionics, Inc., Brochure, "SII: Creative Solutions Today."
	Cobe Renal Care, Inc., "Guide to Custom Dialysis," Product No. 306100-005; Revision E, 9/93, pp. 1-54.
	Cobe Renal Care, Inc., "Sorbent Dialysis Primer," Product No. 306100-006; Edition 4, 9/93, pp. 1-51.

EXAMINER	DATE CONSIDERED

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (REV 7-80)				Atty. Docket No. 3191-003-01		Application No. Unassigned	
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				Filing Date: July 30, 2003		Parent Group Art Unit: 1754	
<b>U.S. PATENT DOCUMENTS</b>							
EXAMINER'S INITIALS		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE, IF APPROPRIATE
		3,520,298	07/14/70	K. Lange	128	213	
		3,545,438	02/12/68	James H. De Vries	128	213	
		3,669,880	06/13/72	Marantz et al.	210	22	
		3,685,680	08/22/72	Tenckhoff et al.	220	27	
		3,850,835	11/26/74	Marantz et al.	252	182	
		3,888,250	06/10/75	Hill	128	214	
		3,939,069	02/17/76	Granger et al.	210	22	
		3,989,622	11/02/76	Marantz et al.	210	22	
		4,088,456	05/09/78	Giorgi et al.	55	179	
		4,190,047	02/26/80	Jacobsen et al.	128	213	
		4,192,748	03/11/80	Hyden	210	87	
		4,412,917	11/01/83	Ahjopalo	210	104	
		4,473,449	09/25/84	Michaels et al.	204	101	
		4,474,853	10/02/84	Watanabe	428	403	
		4,521,528	06/04/85	Kovach	502	208	
		4,650,587	03/17/87	Polak et al.	210	638	
		4,680,122	01/14/87	Barone	210	637	
		4,765,907	08/23/88	Scott	210	648	
		5,004,459	04/02/91	Peabody et al.	604	29	
		5,034,124	07/23/91	Kopf	210	231	
		5,151,082	09/29/92	Gorsuch et al.	604	4	
		5,173,125	12/22/92	Felding	134	22.11	
		5,498,338	03/12/96	Kruger et al.	210	641	
		5,520,632	05/28/96	Leveen et al.	604	9	
		5,549,674	08/27/96	Humes et al.	623	11	
		5,595,909	01/21/97	Hu et al.	435	297.4	
		5,641,405	06/24/97	Keshaviah et al.	210	645	
		5,679,231	10/21/97	Alexander et al.	204	627	
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		5,944,684	08/31/99	Roberts et al.	604	5	

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION YES NO
		EP000152717A1	08/28/85	Europe	604	29	Abstract
		FR2585251	01/30/87	France	A61M	1/34F	Abstract
		08187284	07/23/96	Japan	A61M	1/14	Abstract

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	“Augmentation of Efficiency by Continuous Flow Sorbent Regeneration Peritoneal Dialysis”, A. Gorden et al., Vol. XXII Trans. Amer. Soc. Artif. Int. Organs, 1976, pages 599-604.
	“Centrifugal Artificial Kidney”, R. M. Kellogg, IBM Technical Disclosure Bulletin, Vol. 14, No. 11, April 1972, pages 3433-3435.
	“Combined Technological-Clinical Approach To Wearable Dialysis”, Robert L. Stephen et al., Kidney International, Vol. 13, Suppl. 8 (1978), pages S-125-S-132.
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	“Important Devices in Biomedical Engineering”, John G. Webster, International Biomedical Engineering Days, 1992, pages 1-9.
	“Recirculation Peritoneal Dialysis with Sorbent Redy Cartridge”, Rasib M. Raja et al., Nephron 16, (1976), pages 134-142.
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	“Sorbent Based Regenerating Delivery System For Use In Peritoneal Dialysis”, A. J. Lewin et al., Vol. XX Trans. Amer. Soc. Artif. Int. Organs, 1974, pages 130-134.
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	“A Membrane System to Remove Urea from the Dialyzing Fluid of the Artificial Kidney” Kolff, W. J. et al., Annual rept. no. 2, 1 Jul 78-30 Jun 79)
	“The Regenerative Dialysis (REDY) Sorbent System” Roberts M., Nephrology, 1998, V4, N4 (Aug), P275-278.
	“In search of a 24 Hours Per Day Artificial Kidney” Lande A. J. et al., Journal of dialysis (U.S.) 1977, 1 (8) p.805-23, ISSN 0362-8558.
	“Efficacy of Lumbo-Peritoneal Versus Ventriculo-Peritoneal Shunting for Management of Chronic

	Hydrocephalus Following Aneurysmal Subarachnoid Haemorrhage" Kang S., Acta Neurochirurgica. 142 (1):p.45-49 2000.
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U.S. PATENT DOCUMENTS							
Examiner Initial*		Document Number	Date	Name	Class	Sub Class	Filing Date If Appropriate
		2,328,381	8/31/43	Jaffe	285	161	
		4,042,672 A	08/16/77	Brugger et al.	423	419	
		4,560,472	12/24/85	Granzow et al.	210	140	
		4,738,668	4/19/88	Bellotti et al.	604	283	
		5,032,261	7/16/91	Pyper	210	137	
		5,035,805	7/30/91	Freeman et al.	210	689	
		5,427,683	6/27/95	Gershon et al.	210	264	
		5,498,338	3/12/96	Kruger et al.	210	641	
		5,597,805	1/28/97	Breborowicz et al.	514	19	
		5,631,025	5/20/97	Shockley et al.	424	678	
		5,641,405	6/24/97	Keshaviah	210	645	
		5,704,915	1/6/98	Melsky et al.	604	175	
		5,782,796	7/21/98	Din et al.	604	29	
		5,824,213	10/20/98	Utterberg	210	241	
		5,938,634	8/17/99	Packard	604	29	
		5,955,450	9/21/99	Breborowicz et al.	514	54	
		5,968,966	10/19/99	Bergström	514	400	
		5,980,481	11/9/99	Gorsuch	604	28	
		5,984,891	11/16/99	Keilman et al.	604	65-67	
		6,017,942	1/25/00	Bergström	514	399	
		6,074,359	6/13/00	Keshaviah et al.	604	29	
		6,117,122	9/12/00	Din et al.	604	408	
		6,146,536	11/14/00	Twardowski	210	646	
		6,196,992	3/6/01	Keilman et al.	604	67	
		6,274,103	8/14/02	Taylor	422	261	
		6,284,131	9/4/01	Hogard et al.	210	143	
		6,284,139	9/4/01	Piccirillo	210	645	

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	6,299,769	10/9/01	Falkvall et al.	210	232	
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	Document Number	Date	Country	Class	Sub Class	Translation Yes or No
	1770285A1	10/23/92	Soviet Union			Abstract Only
	3-242206	10/29/91	Japan			Abstract Only
	JP 59046964	1984	Japan			Abstract
	FR 2 585 251-A1	5/1985	France	A61M	1/34,1/14	
	GB 1 467 880	3/1977	Great Britain	B01D	13/00	

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Copy of U.S. Patent Application No. 09/996,505
	Copy of U.S. Patent Application No. 09/995,888
	International Search Report for PCT/US01/44660
	International Search Report for PCT/US01/44623
	Pospelova and Zaitsev. "Carbanto-Compounds of Zirconium", Russian Journal of Inorganic Chemistry, vol. 11, #8, August 1966, pg. 995-1004.

Examiner		Date Considered	
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Form PTO 1449

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